



## **CHAPTER 1.0 INTRODUCTION**

### **1.1 BACKGROUND**

The Salt Lake County East-West Transportation Planning Study – HB 108 is one of several transportation and corridor studies being conducted by the Utah Department of Transportation (UDOT). On February 22, 2007, the Utah legislature passed House Bill HB 108 requiring the UDOT to study the need for east-west transportation improvements in Salt Lake County. The bill also requires the UDOT to report to the legislature the study findings, with improvements costs and timeline estimates, prior to September 30, 2008. The East-West Transportation Planning Study area includes the areas from the Salt Lake/Utah County Line north to the SR 201 freeway and from SR 111 east to the I-15 corridor (see Figure 1-1). This area of the Salt Lake Valley has been and continues to be one of the fastest growing areas in the valley. Because of Kennecott Land's anticipated population growth and its subsequent influence on traffic patterns within the study area, particularly the east-west movements, a planning area was established that includes both the study area and Kennecott Land's land west of SR 111. While the planning area is included in this analysis to assess impacts to traffic patterns within the study area, this plan will not make any recommendations for transportation improvements west of SR 111.

In 2005, the population of the planning area was approximately 465,400 and consisted of roughly 131,700 households with an estimated employment of 177,300. Future projections for the 2030 Beyond scenario show that for the same area the population will be approximately 1,041,300, consisting of roughly 349,395 households and an estimated employment of 377,800. The effects of this expected population growth are particularly important for the transportation infrastructure of the study area and of the Salt Lake Valley as a whole. By identifying the future socioeconomic conditions of the area and assessing how growth impacts the travel demand of the area, decision-makers have the opportunity to proactively develop a system that meets the mobility needs of, and provides choices for, the transportation system of the area.

**Study Area**

**Legend**

- Study Area
- Interstate Hwy
- Major Road (incl. State Hwy)
- US Hwy
- Jordan River

Salt Lake City Municipal Airport

East West Transportation Authority



The East-West Transportation Planning Study focuses on three primary goals that will be executed in a series of three phases. The goals of the project are:

1. Determine and document the current and future transportation needs within the study area. *(Phase I)*
2. Identify and evaluate possible transportation system improvements to satisfy the travel needs in the study area. *(Phase II)*
3. Suggest an implementation schedule for the recommended transportation system improvements. *(Phase III)*

## 1.2 PHASE I APPROACH

The primary goal of Phase 1 was to establish the need for additional transportation improvements in the study area. Both current and future conditions were evaluated together with environmental considerations. To achieve Phase 1 objectives, the following primary tasks were performed:

1. **Identified existing transportation, demographic, and environmental conditions to establish baseline assumptions and to identify areas of concern.** Data used to compile the existing conditions profile included regional roadway characteristics, regional population and employment, demographic characteristics, human-made and natural resources, regulated resources, and jurisdictional land use plans.
2. **Developed socioeconomic projections for two future scenarios.**
  - 2030—This scenario was created using the 2030 WFRC-adopted socioeconomic data for the study area in addition to the 2030 socioeconomic data for growth projected on Kennecott Land’s property east of SR 111.
  - 2030 Beyond—This scenario was created for data collected from local jurisdictions and regional representatives according to their projected growth patterns beyond 2030. As with the 2030 scenario, Kennecott Land’s projected growth is accounted for in this scenario. The 2030 Beyond scenario is not one that represents a specific year, but instead is a point in time where jurisdictional build-out within the study area occurs.
3. **Forecasted traffic volumes for the 2005, 2030, and 2030 Beyond scenarios and conducted traffic analysis condition and flows.** The information gathered during Phase I provided insight about where in the study area traffic patterns are most impacted by the socioeconomic conditions of the scenario. This information was





used in Phase II alternatives development to identify areas where particular consideration needs to occur.

4. **Gathered stakeholders concerns and inputs regarding transportation issues in the study area.** The stakeholder involvement process included meetings with the Stakeholder Working Group (SWG), which included jurisdiction representatives within the study area, various state and local agencies, and others. These meetings were held to assure that all concerns were being addressed and that local representatives were in agreement with the assumptions.

### 1.3 PHASE II APPROACH

The primary purpose of Phase II was to identify a range of alternatives that contained a number of improvements intended to address the transportation mobility issues within the study area. The process began with a brainstorming session where the study team identified numerous improvement concepts. These concepts were based on addressing the issues identified during Phase I as well as the goals identified by the SWG. These concepts were reviewed and refined in an effort to generate the initial two system alternatives. Analysis of each system alternative was then conducted and the results, as well as the two system alternatives were then presented to the SWG and two focus for further feedback. Feedback received was then further evaluated in an effort to identify the suggested system alternative.

### 1.4 PHASE III APPROACH

The purpose of the Phase III efforts was to develop an implementation plan for the proposed improvements (Suggested System Alternative) recommended in Phase II. The plan suggests costs and implementation timelines for each of the individual projects that would comprise the entire Suggested System Alternative. The costs were inflated based on the implementation year to show an adjusted cost to complete all of the projects assuming inflation. A user cost savings was also developed to illustrate the benefit of each project given the implementation timeframe identified in the plan. The implementation plan is a key part of this study, providing insight into both improvement costs and timeline estimates as part of a broader implementation plan that incorporates nearly all of the study's long-term findings and recommendations.

As an additional part of Phase III, the UDOT requested a set of near-term solutions that would improve the mobility in the study area within the next five years. For this effort, the consultant team identified several innovative corridor and intersection improvements to increase the capacity of several congested corridors and numerous congested intersections within the study area. The consultant team also developed planning level budgets for making the improvements in the near term.